

AMENDMENT TO THE CLAIMS

1-23. (canceled).

24. (new) An apparatus for coupling at least a battery tester to a battery comprising:

a replaceable clamp comprising:

a first hand grip;

a first electrical plug positioned in the first hand grip and electrically coupled to a first set of Kelvin conductors;

a cable including a second set of Kelvin conductors; and

a second electrical plug electrically coupled to the second set of Kelvin conductors, wherein the first electrical plug and the second electrical plug are configured to removably electrically couple together in the first hand grip such that the first set of Kelvin conductors and the second set of Kelvin conductors are removably electrically coupled together.

25. (new) The apparatus of claim 24, further comprising a terminal coupled to the cable and having a terminal hole configured for alignment with an aperture in the first hand grip.

26. (new) The apparatus of claim 25, further comprising a removable fastener which couples the terminal to the first hand grip through the terminal hole in the first hand grip.

27. (new) The apparatus of claim 25, wherein the terminal comprises a tin-plated ring.

28. (new) The apparatus of claim 26, wherein the removable fastener comprises a nut and bolt.

29. (new) The apparatus of claim 24, wherein when the first electrical plug and the second electrical plug are electrically coupled together, the first set of Kelvin conductors and the second

set of Kelvin conductors are capable of injecting a forcing function into a battery and providing a sensor lead for sensing a physical property of the battery.

30. (new) The apparatus of claim 24, wherein the first and second set of Kelvin conductors comprise acid-resistant conductors.

31. (new) An apparatus for coupling at least a battery tester to a battery comprising:

- a replaceable clamp configured to contact a battery, the replaceable clamp comprising:

- a first hand grip;

- a first electrical plug positioned in the first hand grip and electrically coupled to a first set of Kelvin conductors;

- a cable including a second set of Kelvin conductors and a terminal;

- a second electrical plug electrically coupled to the second set of Kelvin conductors, wherein the first electrical plug and the second electrical plug are configured to removably electrically couple together in the first hand grip such that the first set of Kelvin conductors and the second set of Kelvin conductors are removably electrically coupled together; and

- a removable fastener configured to removably couple the terminal to the replaceable clamp.

32. (new) The apparatus of claim 31, wherein the first hand grip comprises an aperture.

33. (new) The apparatus of claim 32, wherein the terminal comprises a terminal hole formed therein, the terminal hole configured to align with the aperture in the first hand grip.

34. (new) The apparatus of claim 33, wherein the fastener is configured to removably couple the terminal to the replaceable clamp through the terminal hole and the aperture in the first hand grip to couple the cable to the replaceable clamp.

35. (new) The apparatus of claim 31, wherein the terminal comprises a tin-plated ring.

36. (new) The apparatus of claim 31, wherein the removable fastener comprises a nut and bolt.

37. (new) The apparatus of claim 31, wherein when the first electrical plug and the second electrical plug are electrically coupled together, the first set of Kelvin conductors and the second set of Kelvin conductors capable of injecting a forcing function into a battery and providing a sensor lead for sensing a physical property of the battery.

38. (new) The apparatus of claim 31, wherein the first and second set of Kelvin conductors comprise acid-resistant conductors.

39. (new) A method of replacing a first battery clamp with a second battery clamp, the method comprising:

- obtaining a first replaceable clamp including a first hand grip, a first electrical plug positioned in the first hand grip and a first set of Kelvin conductors, the first electrical plug electrically coupled to the first set of Kelvin conductors;

- obtaining a cable including a second set of Kelvin conductors electrically coupled to a second electrical plug;

- disconnecting the first electrical plug from the second electrical plug; and

- connecting a third electrical plug in a second replaceable clamp to the second electrical plug, the third electrical plug positioned in a first hand grip of the second

replaceable clamp and electrically coupled to a third set of Kelvin conductors in the second replaceable clamp.

40. (new) The method of claim 39, wherein the cable is further coupled to a terminal having a terminal hole through which a removable fastener couples the cable to the first replaceable clamp through an aperture in the first hand grip.

41. (new) The method of claim 40, further comprising decoupling the terminal from the first hand grip by removing the removable fastener.

42. (new) The method of claim 41, further comprising coupling the terminal through an aperture in the first hand grip of the second replaceable clamp.